

Remarks

Claims 1-20 are pending in the application. Claims 1-14 were rejected and claims 15-20 were withdrawn. By this Amendment, claims 1-4 have been amended. Reconsideration of the claims is respectfully requested. No new matter has been added.

Rejection Under 35 U.S.C. § 103

Claims 1-4, 7 and 8 were rejected under § 103(a) as being unpatentable over JP 404240037 issued to Honda et al. (hereinafter "Honda '037") in view of U.S. Patent No. 4,741,078 issued to Kimura (hereinafter "Kimura '078"). Applicants have amended claim 1 to recite a spindle positioning apparatus that includes "a mounting plate assembly attached to the robotic manipulator, the mounting plate assembly having a fixed plate disposed proximate the robotic manipulator and a movable plate movably attached to the fixed plate; a first spindle disposed on the fixed plate in a fixed position; and a second spindle disposed on the movable plate and movable with respect to the first spindle." Honda '037 and Kimura '078, either alone or in combination, do not disclose or suggest a spindle positioning apparatus as claimed. For example, neither reference discloses a first spindle disposed on the fixed plate in a fixed position and a second spindle disposed on the movable plate that is movable with respect to the first spindle and the fixed plate. Instead, the Abstract of Honda '037 clearly states that "a movable spindle head 17 ... and the same fixed spindle head 16 is provided on the unit plate 13." In other words, the fixed spindle head 16 and the movable spindle head 17 are mounted on the same unit plate 13, not fixed and movable mounting plates as claimed (note that unit plate 13 is contiguously shown behind and between spindle heads 16 and 17 in Figure 3). Consequently, the rejection of claim 1 is believed to be overcome. Since claims 2-4, 7 and 8 depend on claim 1, the rejection of these claims are believed to be overcome for the same reasons.

Claims 5 and 6 were rejected under § 103(a) as being unpatentable over Honda '037 in view of Kimura '078, and further in view of U.S. Patent No. 5,205,805 issued to Otani et al. (hereinafter "Otani '805"). Claims 5 and 6 depend on claim 1. Consequently, these claims are believed to be allowable for the reasons previously discussed.

In addition, a *prima facie* case has not been established for the rejection of claims 5 and 6. In the Office Action, the Examiner looked to Otani '805 as the sole basis for support of the elements in these claims. Otani '805 does not disclose or remotely suggest a ball nut. In the Office Action, the Examiner stated that element 25 in Otani '805 was a ball nut (see Office Action, page 5). Element 25 is a feed screw, not a ball nut as claimed (see column 3, line 28). Thus, Applicants respectfully request that the rejection of these claims be withdrawn.

Claims 9, 10 and 14 were rejected under § 103(a) as being unpatentable over Honda '037 in view of Kimura '078. Claim 9 recites a multi-spindle positioning assembly comprising "a multi-axis robot having a manipulator arm; and a spindle positioning apparatus including: a first mounting plate attached to the manipulator arm and having a first opening; a second mounting plate movably attached to the first mounting plate and having a second opening; a first spindle extending through the first opening and attached to the first mounting plate; a second spindle extending through the second opening and attached to the second mounting plate; and an actuator mechanism adapted to position the second spindle with respect to the first spindle." In the Office Action, the Examiner looked to Honda '037 as the sole reference for all elements of claim 9 except a multi-axis robot having a manipulator arm. A *prima facie* case has not been established for the rejection of claim 9 for the following reasons.

First, Honda '037 does not disclose or suggest a first spindle attached to a first mounting plate and a second spindle attached to a second mounting plate. Instead, the Abstract of Honda '037 clearly states that "a movable spindle head 17 ... and the same fixed spindle head 16 is provided on the unit plate 13." In other words, the fixed spindle head 16 and the movable spindle head 17 are mounted on the same unit plate 13, not first and second mounting plates as claimed (note that unit plate 13 is contiguously shown behind and between spindle heads 16 and 17 in Figure 3).

Second, since the spindles are mounted on the same unit plate, Honda '037 cannot logically disclose or suggest a second mounting plate (to which the second spindle is attached) that is "movably attached to the first mounting plate" (to which the first spindle is attached) as recited in claim 9.

Third, even if Honda '037 did disclose first and second mounting plates, it does not disclose or suggest a first mounting plate having a first opening, a first spindle extending through a first opening, a second mounting plate having a second opening, or a second spindle extending through a second opening. In the Office Action, the Examiner pointed to the Abstract and annotated Figure 3 for support (see Office Action, pages 3 and 6). The Abstract and Figure 3 are silent regarding any openings in a mounting plate, let alone openings through which spindles may extend. Moreover, Applicants also note that the Examiner was unable to point with particularity to any element of Honda '037 as being a first opening or a second opening, even in Annotated Figure 3. As such, Applicants are left to guess as to what the Examiner considers to be a first opening or a second opening. Applicants request that the Examiner point with particularity to first and second openings as claimed in the next communication if this rejection is maintained.

For these reasons, Applicants respectfully believe that a *prima facie* case has not been established for the rejection of claim 9 and request that this rejection be withdrawn. Since claims 10 and 14 depend on claim 9, a *prima facie* case has not been established for the rejection of these claims for the same reasons.

Claims 11-13 were rejected under § 103(a) as being unpatentable over Honda '037 in view of Kimura '078 and further in view of Otani '805. Claims 11-13 depend on claim 9. Consequently, these claims are believed to be allowable for the reasons previously discussed.

Even if a proper rejection was established for the rejection of claim 9, a *prima facie* case has not been established for the rejection of claims 11 and 12 as the cited references do not disclose or suggest a ball nut. In the Office Action, the Examiner stated that element 25 in Otani '805 was a ball nut (see Office Action, page 7). Element 25 is a feed screw, not a ball nut as claimed (see column 3, line 28). Thus, Applicants respectfully request that the rejection of these claims be withdrawn.

Conclusion

Applicants have made a genuine effort to respond to the Examiner's objections and rejections in advancing the prosecution of this case. Applicants believe all formal and substantive requirements for patentability have been met and that this case is in condition for allowance, which action is respectfully requested. Please charge any fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978.

Respectfully submitted,

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